



2014 CORVETTE STINGRAY TRACK PREPARATION



The 2014 Corvette Stingray with the Z51 Performance Package has been designed and engineered to be a world-class sports car for the track. But before unleashing its acceleration, cornering and braking capability, there are several key procedures and steps that must be taken in order to properly experience its track prowess. For full details and information, see the vehicle Owner's Manual.

Please Note: The Corvette Stingray with the Z51 Performance Package is the recommended model for track use.

1. ATTAIN THE RIGHT MILEAGE

NEW VEHICLE BREAK-IN (OWNER'S MANUAL: 9-17)

All Corvette Stingray models have a recommended break-in period during the first 1,500 miles (2414 km) that will prolong its performance and driving precision.

PART/DRIVING BEHAVIOR	TIME PERIOD	RECOMMENDED ACTION
Tires	First 200 miles (322 km)	Drive at moderate speeds and avoid hard cornering
Brake linings	First 200 miles (322 km)	Avoid making hard stops (recommended every time brake linings are replaced)
Full throttle starts and abrupt stops	First 500 miles (800 km)	Avoid full throttle starts and abrupt stops
Exceeding 4000 rpm	First 500 miles (800 km)	Avoid exceeding 4000 rpm
Cruise control or driving at one constant speed	First 500 miles (800 km)	Avoid cruise control or driving at one constant speed
Letting the engine labor or lugging the engine	First 500 miles (800 km)	Avoid letting the engine labor or lugging the engine. With a manual transmission, shift to the next lower gear (this rule applies at all times, not just during the break-in period)
Track or competitive driving	First 1,500 miles (2414 km)	Do not participate in track events, sport driving schools or similar activities
Engine oil	First 1,500 miles (2414 km)	Check engine oil with every refueling and add if necessary (oil and fuel consumption may be higher than normal during the first 1,500 miles)

2. SEASON THE BRAKES

BRAKE BURNISH PROCEDURE (OWNER'S MANUAL: 9-9)

After the new vehicle break-in period, Corvette Stingray Z51 Performance Package brake pads must be burnished (following the steps below) before racing or competitive driving.

- 1. Medium Brake Application:** Apply the brakes 25 times starting at 60 mph (100 km/h) to 30 mph (50 km/h) while decelerating at 0.4 g. Drive for at least 0.6 miles (1 km/h) between applying the brakes. This first step may be skipped if there are more than 200 miles (320 km/h) on the brake pads.
- 2. Hard Brake Application:** Repeatedly apply the brakes from 60 mph (100 km/h) to 15 mph (25 km/h) while decelerating at 0.8 g. Drive for at least 0.6 miles (1 km/h) between stops. Repeat until the brake pedal travel starts to increase. Depending on conditions, this should take no longer than 25 brake applications.
- 3. Cool Down:** Drive at 60 mph (100 km/h) for approximately 10 miles (15 km) without using the brakes.
- 4. Medium Brake Application:** Apply the brakes 25 times from 60 mph (100 km/h) to 30 mph (50 km/h) while decelerating at 0.4 g. Drive for at least 0.6 miles (1 km) between applications.

Please Note: The brake burnish procedure is specific to the Z51 brake package and should not be run on any other models as damage may result. When this procedure is performed as instructed, it will not damage the brakes. The brake pads will smoke and produce an odor. The braking force and pedal travel may increase. After the procedure, the brake pads may appear white at the rotor contact. Perform this procedure only on dry pavement and in a safe manner and in compliance with all local and state ordinances/laws regarding motor vehicle operation.

Rotor cooling rings (provided at the time of vehicle delivery in a clear plastic bag) are recommended for track use (driving without the rotor cooling rings may result in brake pedal fade). Do not leave them installed after a track event, as this may cause corrosion with long-term use. Installation instructions are included with the rings and can be found in section 9-7 of the Owner's Manual.





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3. ADJUST THE FOUR CORNERS

TIRE PRESSURE AND WHEEL ALIGNMENT (OWNER'S MANUAL: 9-6)

The tires on Corvette Stingray (with the Z51 Performance Package) require inflation and pressure adjustment when driving at high speeds on a track (where legal).

- Limit the vehicle load to the driver only, with no other cargo and inflate the tires to 26 psi (180 kPa); drive at a maximum speed of 174 mph (280 km/h)
- Return the tires to the recommended cold tire inflation pressure when high-speed driving has ended

Corvette Stingray (with the Z51 Performance Package) wheel alignment settings should be set as follows for track use (and returned to normal when high-speed driving has ended):

- | | |
|----------------------------|----------------------------|
| Front (per corner) | Rear (per corner) |
| ▪ Caster: +7.0 degrees | ▪ Caster: 0 degrees |
| ▪ Camber: -2.0 degrees | ▪ Camber: -1.7 degrees |
| ▪ Toe: 0.05 degrees toe in | ▪ Toe: 0.05 degrees toe in |
| Thrust Angle: 0 degrees | |

FRONT LICENSE BRACKET/AERO PANEL

The aero panel (if being used as a license plate holder) should be removed for track events and competitive driving to improve engine performance.

4. CHECK YOUR FLUID LEVELS

FLUIDS AND LUBRICANTS (OWNER'S MANUAL: 9-6, 11-12)

Be sure to follow all service procedures before driving Corvette Stingray (with the Z51 Performance Package) on the track or competitively. Any fluids or lubricants that are changed should be restored back to normal before returning to street driving.

FLUID/LUBRICANT	TO DO	WHEN
Oil (Mobil 1™ 15W50 Recommended for Track/ Competitive Driving)	Check the oil level and keep it at or near the upper mark that shows the proper operating range on the engine oil dipstick	Often (before and after every track event or competitive driving session)
Brake Fluid (Dot4 Recommended for Track/Competitive Driving)	Replace existing brake fluid with a qualified high-performance brake fluid from a sealed container (brake fluid with a dry boiling point >534°F [279° C] is qualified)	If high-performance brake fluid is in the vehicle and the age of the brake fluid is over a month old or unknown, replace the brake fluid before track events of competitive driving (if high-performance brake fluid is used, replace it with GM-approved brake fluid before driving on public roads)
Rear Axle Fluid	Because fluid temperatures may be higher, it is necessary to change the rear axle fluid	Every 24 hours of track events or competitive driving



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5. TURN UP THE PRECISION

DRIVER MODE SELECTOR (OWNER'S MANUAL: 9-38)

Track mode should be selected for track use or competitive driving in Corvette Stingray (with the Z51 Performance Package). The outer ring of the Driver Mode Selector is located on the console behind the shift lever. It rotates to change the modes, which display in the instrument cluster.

PERFORMANCE TRACTION MANAGEMENT (OWNER'S MANUAL 9-43)

Corvette Stingray models (with the Z51 Performance Package) that have Magnetic Selective Ride Control™ incorporate Performance Traction Management (PTM), which integrates the Traction Control, StabiliTrak® and Selective Ride control systems to provide consistent performance when cornering in track situations.

Please Note: Participating in track events or other competitive driving without following the instructions provided may affect the vehicle warranty. See the warranty manual before using the vehicle for racing or other competitive driving.

To utilize PTM in Corvette Stingray (with the Z51 Performance Package):

- The vehicle must be in Track mode
- Then, quickly press the TCS/StabiliTrak button on the center console two times
- To select a mode, turn the Selective Ride Control/ Performance Traction Management MODE SELECT knob on the center console

PTM contains five modes. Mode 5 is race active with handling off. It is for use by experienced drivers who are familiar with the track, requires the most driving skill and should be used on dry conditions only. StabiliTrak is off and engine power is available for maximum cornering speed.

For more details, see the Corvette Stingray Owner's Manual.

AFTER THE TRACK

After driving your Corvette Stingray (with the Z51 Performance Package) on the track, it is important to return the vehicle back to the original factory settings with the proper fluids before normal street driving.

- Remove the brake rotor cooling rings
- Return the tire pressure settings to factory (see the Tire and Loading Information label located below the door latch with the door open)
- Return the wheel alignment settings to factory
- Reattach the front license plate bracket/aero panel (if removed)
- Replace oil (use only engine oil licensed to the dexos1 specification of the proper SAE viscosity grade)
- Replace brake fluid (DOT3 Hydraulic Brake Fluid)
- Replace rear axle fluid (DEXRON® LS Gear Oil)
- Rotate the Driver Mode Selector out of Track mode

For full details and information, see the vehicle Owner's Manual.